

## **ABSTRACT**

Some embodiments of the invention provide a method that pre-computes routes for groups of related net configurations. These routes are used by a router that uses a set of partitioning lines to partition a region of a design layout into a plurality of sub-regions.

The method identifies groups of related sub-region configurations. For each group, the method stores a base set of routes. For each configuration in each group, the method also stores an indicia that specifies how to obtain a related set of routes for the particular configuration from the base set of routes stored for the configuration's group.